SOLAR MAP Municipal Assistance Program

Colchester 5/11/2021

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Sustainable CT
Local Actions. Statewide Impact.

CSW ENERGY

CONNECTICUT GREEN BANK

Connecticut Green Bank

Support the Governor's and legislature's energy strategy to achieve cleaner, cheaper and more reliable sources of energy while creating jobs and supporting local economic development

SOLAR MAP Municipal Assistance Program

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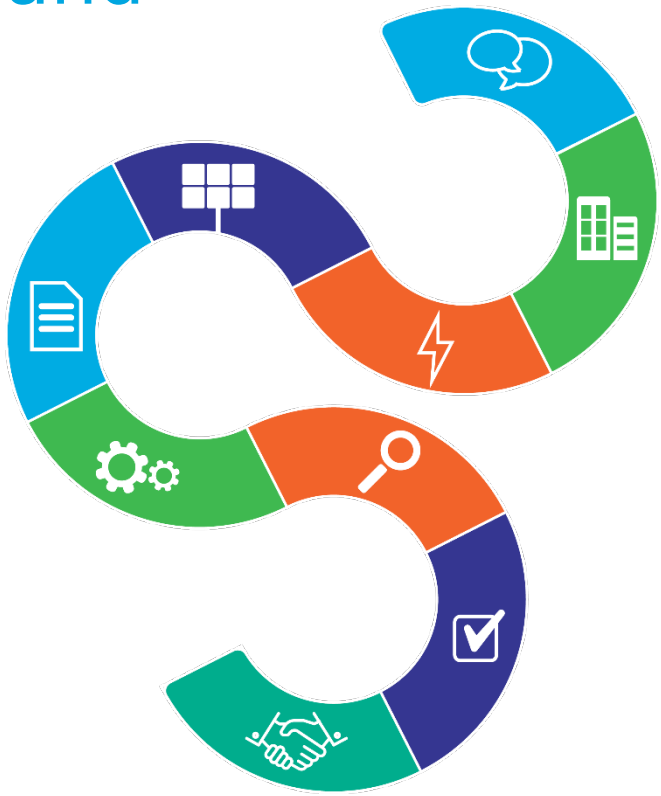
Less work. More benefits. Now even easier for towns and cities.

- Makes it even easier for municipalities to access renewable energy and achieve energy savings using the Green Bank Solar PPA
- Provides technical assistance support that simplifies every step of the process



SOLAR MAP Municipal Assistance Program

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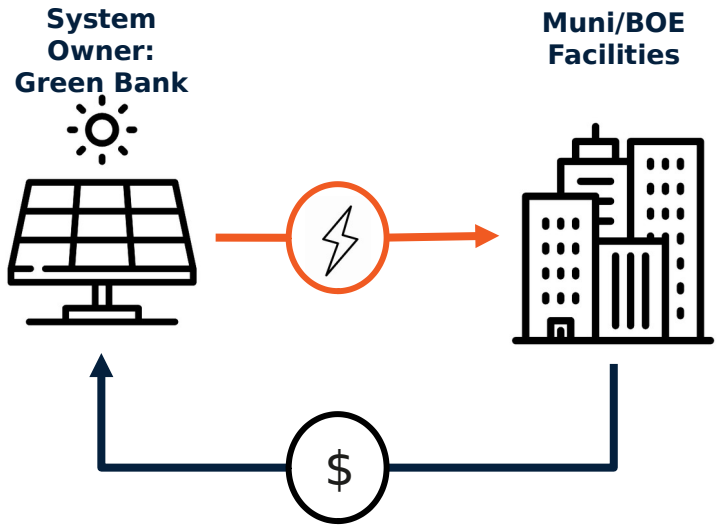
1. **Engage.** The SolarMAP team will meet with you to understand your municipality's goals, **gather information** and identify key participants, and explain the SolarMAP process in more detail.

2. **Design.** Using the information you provide, the SolarMAP team will perform analysis of municipal sites, review energy demand, and **develop system designs**.

3. **Review**. After you review the system designs, the SolarMAP team will **secure the utility incentives** (ZRECs) needed for each project and **solicit proposals** from qualified solar contractors and select the best proposal.

4. **Execute**. Once a proposal has been selected and incentives secured, the SolarMAP team will work with you to **execute the PPA** and begin construction of the solar project(s).

What is a Power Purchase Agreement ("PPA")?



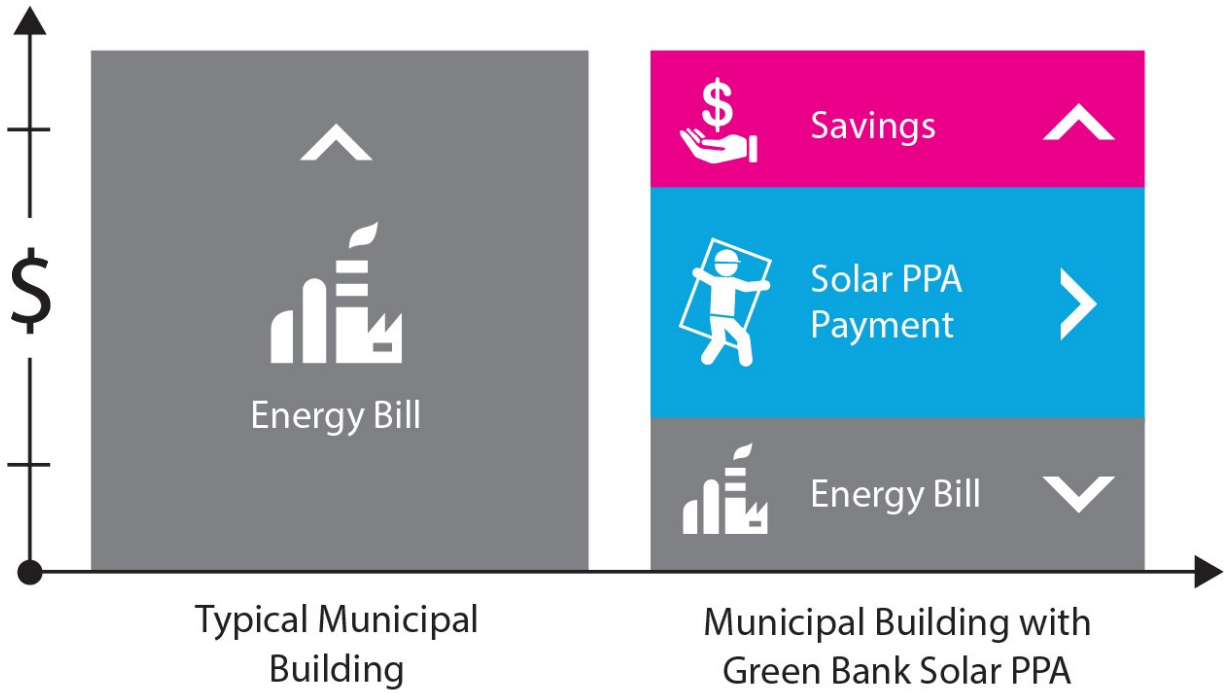
Contract between Seller (generates electricity) and Buyer (purchases electricity)

Green Bank is Seller: Oversees development, construction, & asset management

Municipality is Buyer: Purchases electricity from solar installed on property

What are the Benefits of a PPA?

The value of solar PV comes from electricity cost savings!



*Representative project for illustrative purposes only

What are the Benefits of a PPA?

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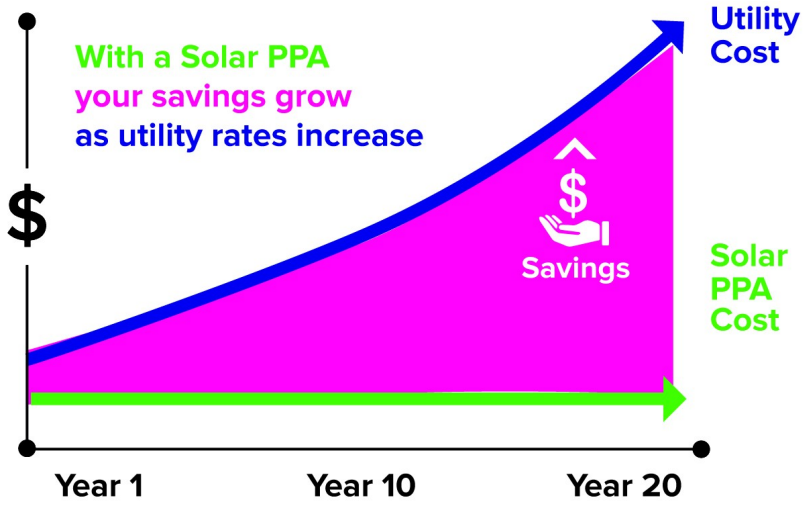
- **No upfront costs**
- **Lock in low electricity rate**
- **Positive cash flow**
- **No operations & maintenance costs**
- **Preserve capital & credit lines**
- **Managed by a third-party solar system owner**



Round 1 Results

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SOLAR MAP Municipal Assistance Program

5 **Municipalities**

16 **Projects in Total**

3.5 **Megawatts (dc) of Solar**

22% - 59% **Year 1 Discount from Current Utility Rate**

$4 **Million in Term Savings**

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Colchester

Colchester Elementary School

Project Details	
Project size (kW DC)	452.6
Estimated Annual Production (kWh)	524,950.8
Effective Utility Rate	$0.085
Savings Feasibility	
Met preliminary 10% discount threshold	Yes
% Solar Offset to Utility	73%

Colchester Elementary School

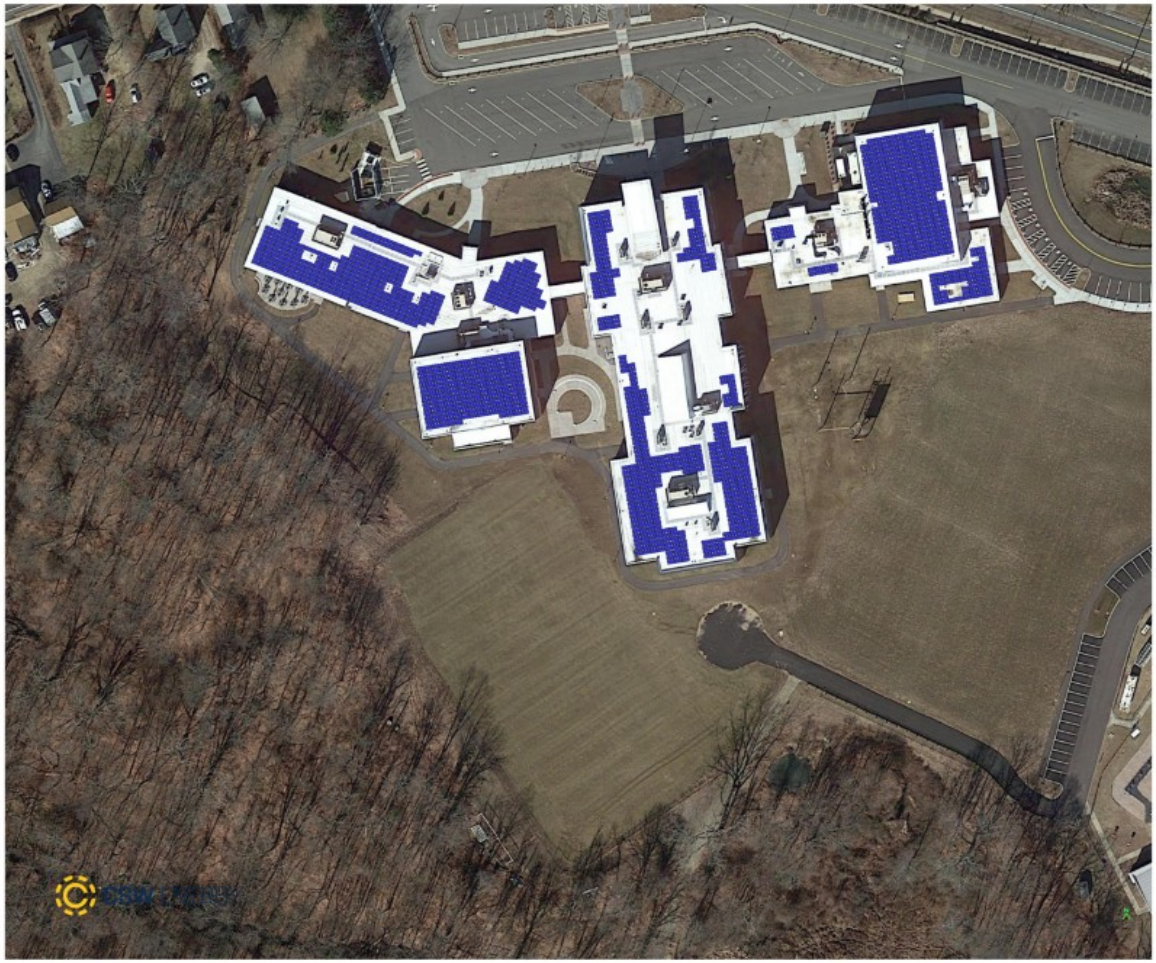
Minimum Savings

Savings		
Term Savings	$	257,799
Average Annual Savings	$	12,890
First Year Savings	$	4,420
Operations & Maintenance Cost Included		

Model and Finance Assumptions	
System Size kW	453 kW
Solar Energy Generated	524,951 kWh
Annual Solar System Degradation	0.64%
Solar Energy PPA Price	$0.076 / kWh
Solar Energy Escalator	0.00%
Utility Energy Price	$0.084 / kWh
Utility Energy Escalator	2.00%

W.J. Middle School

Project Details	
Project size (kW DC)	519.9
Estimated Annual Production (kWh)	602,913
Effective Utility Rate	$0.085
Savings Feasibility	
Met preliminary 10% discount threshold	Yes
% Solar Offset to Utility	85%



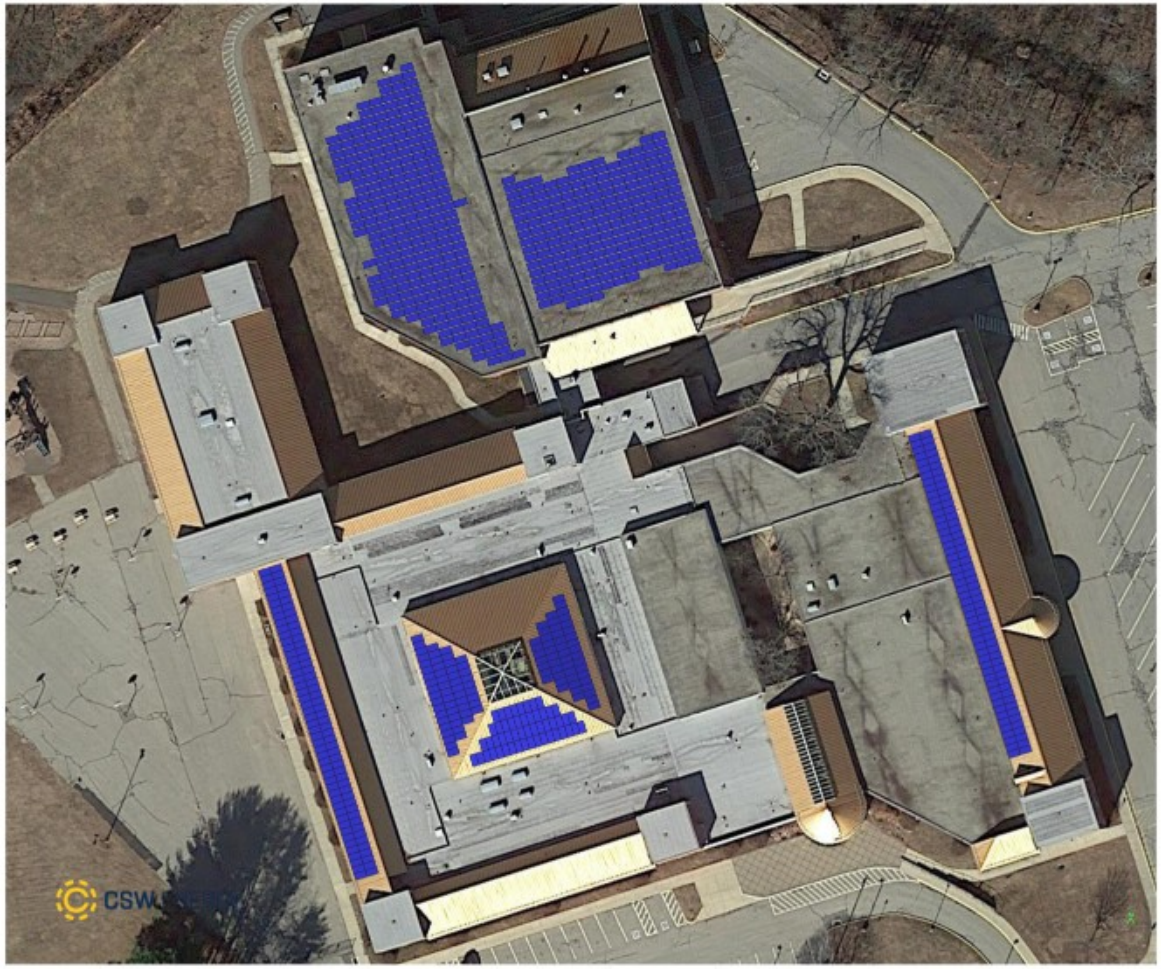
W.J. Middle School
Minimum Savings

Savings		
Term Savings	$	296,086
Average Annual Savings	$	14,804
First Year Savings	$	5,077
Operations & Maintenance Cost Included		

Model and Finance Assumptions	
System Size kW	520 kW
Solar Energy Generated	602,913 kWh
Annual Solar System Degradation	0.64%
Solar Energy PPA Price	$0.076 / kWh
Solar Energy Escalator	0.00%
Utility Energy Price	$0.084 / kWh
Utility Energy Escalator	2.00%

Jack Jackter Intermediate

Project Details	
Project size (kW DC)	333.3
Estimated Annual Production (kWh)	381,183
Effective Utility Rate	$0.085
Savings Feasibility	
Met preliminary 10% discount threshold	Yes
% Solar Offset to Utility	58%



Jack Jackter Intermediate

Minimum Savings

Savings		
Term Savings	$	187,196
Average Annual Savings	$	9,360
First Year Savings	$	3,210
Operations & Maintenance Cost Included		

Model and Finance Assumptions	
System Size kW	333 kW
Solar Energy Generated	381,183 kWh
Annual Solar System Degradation	0.64%
Solar Energy PPA Price	$0.076 / kWh
Solar Energy Escalator	0.00%
Utility Energy Price	$0.084 / kWh
Utility Energy Escalator	2.00%

Minimum Savings

Based on conservative preliminary 10% discount

Colchester	First Year Savings	Term Savings
Colchester Consolidated School	$ 4,420	$ 257,799
WJ Middle School	$ 5,077	$ 296,086
Jack Jackter Intermediate	$ 3,210	$ 187,196
Total	**$ 12,707**	**$ 741,081**

Next Steps and Timeline

Initial meetings	January 2021
Project Development & Project list finalized	Q1 2021
Sign Letter of Intent and incentive paperwork	May 2021
Submit projects for Utility incentives (ZRECs)	June 14th 2021
RFP for Contractors	Fall 2021
Execute PPA	Q4 2021
Construction Start	Q1 2022

Questions?

Thank you!

Contact:

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https://www.ctgreenbank.com/solarmap-townsandcities

Appendix

Green Bank Solar PPA
BOEs and Municipal

- Ashford
- Bethany
- Bloomfield
- Branford
- Bridgeport
- Chaplin
- Coventry
- Darien
- Deep River (regional)
- Eastford
- Easton
- Ellington
- Essex
- Fairfield
- Falls Village
- Hampton
- Harwinton (regional)
- Lebanon
- Manchester
- Mansfield
- New Fairfield
- New Haven
- Newtown
- Orange
- Portland
- Ridgefield
- Salisbury
- Union
- Voluntown
- Woodbridge

Town of Coventry: Green Bank Solar PPA Case Study

8 solar PV systems (over 580 kW) financed with the Green Bank Solar PPA

- Includes Town Hall, Police Headquarters, Radio Tower Annex, and five Board of Education buildings including schools and warehouse space
- Six roof mounted solar PV systems and two carport solar PV systems

Desktop Review (first look)
Town of Colchester

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4 / 4
Passed / Total Sites

		Can the roof: fit a 50kWac installation? >>>	**Is the roof free from:** roof pitches, HVAC units, etc. that could inhibit a solar installation?	**Is the roof free from:** any impact from tree shading, other buildings, etc.?	**<<< *If* the roof is not viable:** any potential for a ground-mount and/or carport installation?	**Results from:** Roof Size Obstructions Shading Ground/Carport	**Utility bill review:** does the site have the minimum kWh usage to meet the program system size requirements?
Site Name	**Site Address**	**Roof Size**	**Roof Obstructions**	**Shading**	**Ground or Carport**	**CSW Desk Review**	**CSW Usage Review**
Colchester Elementary School	315 Halls Hill Rd, Colchester, CT 06415	☑	☑	☑	☐	**Pass**	**TBD**
William J. Johnston Middle School	360 Norwich Ave, Colchester, CT 06415	☑	☑	☑	☐	**Pass**	**TBD**
Jack Jackter Intermediate School	215 Halls Hill Rd, Colchester, CT 06415	☑	☑	☑	☐	**Pass**	**TBD**
Bacon Academy	611 Norwich Ave, Colchester, CT 06415	☑	☑	☑	☐	**Pass**	**TBD**

No	☐
Yes	☑

Program Benefits

- Trusted partner in the CT Green Bank, a quasi-state agency
- Take advantage of the final year of the utility incentive program
- Group your town's projects with other participating towns to receive competitive pricing
- Support from start to finish developing any projects you choose to move forward with